

## State of South Carolina: Network Description and Ambient Air Network Monitoring Plan Calendar Year 2008 Response to Comments Received

### Comments from SC Chamber of Commerce Environmental Technical Committee (ETC):

**1. The ETC very much appreciates the opportunities provided by the South Carolina Department of Health and Environmental Control (SCDHEC) for stakeholder involvement in the process of evaluating some of the monitor sites (to date) and the PLAN.** The opportunity provided by SCDHEC for several stakeholder groups across the State to provide input to the PLAN and assist SCDHEC in evaluating the sites to determine compliance with the requirements of 40 CFR 58 Appendices A, C, D and E should be commended.

*The Department acknowledges this comment.*

**2. The ETC recommends that an explicit statement be included in the PLAN summary that emphasizes SCDHEC's commitment to meet all of the "musts" in the regulation and as many of the "shoulds" as possible in the regulation and guidance.** The ETC recommends that the PLAN explicitly state that SCDHEC is committed to meet all of the "musts" and as many of the "shoulds" as possible as recommended in the Federal Regulations and monitoring siting guidance. Questions and uncertainty regarding the legitimacy of the data will be minimized if a consistent approach, in accordance with the regulation and guidance, is taken to ensure the most suitable monitor location. This will allow South Carolina to collect data with certainty, and at the same time, resolve legitimate air quality issues with confidence. Therefore, this defined approach to determine the most suitable monitor location will only assist in improving the quality of ambient air data collection. This is a must in this day and age of ever-decreasing National Ambient Air Quality Standards and of increasing intensity for the need of representative, accurate and reliable monitoring data.

*The Department agrees with this comment and has modified the plan's introduction to add language which states "It is the Department's intent that all criteria pollutant monitors and samplers be sited and operated consistent with the requirements of 40CFR §58 and Appendices A (Quality Assurance), C (Methods), D (Network Design) and E (Probe Siting Criteria) and the data collected by these samplers and monitors is suitable for comparison to the National Ambient Air Quality Standards. The Department further intends to assure that the samplers and monitors comply with as many of the recommendations contained within the regulations and applicable guidance documents as is possible."*

**3. The ETC recommends for the PLAN to be more specific with respect to replacing monitors that were found to have issues during site evaluations.** In several places throughout the PLAN, future plans for individual monitors are not specific enough to clearly state that a monitor will be moved. This is a particular problem where site evaluations have shown that the required siting criteria are not being met. The ETC recommends that the PLAN be revised to clearly state the intention to bring these sites into compliance if possible or to find a new, compliant site as soon as possible. As stated earlier, the "redlined" version of the PLAN is enclosed and will reflect our recommendations to revise the description of needs at these sites.

*The Department understands the concerns expressed in this comment, however; many factors come into play when establishing new monitoring sites. The Department has to identify potential sites for monitors, select the appropriate site(s), begin acquiring rights to the property and establish utilities before measurements can begin. Furthermore, once the new site has been established, it is the Department's practice that the existing and potential replacement sites are run concurrently until the procedures for relocating a monitor/site have been completed. Additionally, there are no firm timelines that the*

*Department can give as to when a suitable site can be found. Efforts will begin immediately, but ultimately the establishment of a new site is contingent upon acquiring land for the site and an adequate data record for evaluation. The Department agrees that sites found to not meet siting criteria should be improved, supplemented or replaced whenever possible*

**4. The ETC recommends that SCDHEC immediately pursue discontinuing monitors that are inappropriately sited. Additionally, SCDHEC should indicate which sites are to be used for monitoring near local sources (e.g., special purpose monitors). Special purpose monitors should utilize alternative means of measuring pollutants so the data are not eligible for determining compliance with National Ambient Air Quality Standards (NAAQS).** The ETC recognizes SCDHEC's desire to monitor air quality in close proximity to certain sources (e.g., near quarries, ports, industrial facilities, dusty roads, etc.). However, federal regulations and monitor siting guidance specifically recommend maintaining a reasonable distance from sources if data is to be used for comparison to the NAAQS. The reason is locating monitors in close proximity biases the resulting data high to extremely high, depending on the distance from the source. Neighboring states have confirmed that they do not locate monitors in close proximity to local sources, thus avoiding the problem entirely. Resulting data from neighboring states confirms that no elevated PM<sub>10</sub> data exists despite the presence of similar sources.

The ETC proposes that the PLAN include recommendations for discontinuing or relocating existing monitors located in very close proximity to local sources (e.g., Cayce CMS, Georgetown CMS, and Howard High School). However, it is ETC's recommendation that if special purpose monitoring is determined to be necessary, then one (1) of the following two (2) methods should be utilized to collect the data:

- a) Temporary monitors that are operated no longer than necessary to determine compliance status (e.g., 4 to 6 weeks) and then discontinued.
- b) Alternate monitoring device (not FRM or FEM) to obtain special purpose data; effectively disqualifying that data from being used for comparison to the National Ambient Air Quality Standards.

It is the ETC's belief that the above methods will allow for SCDHEC to monitor air quality in close proximity to certain sources (e.g., near quarries, ports, industrial facilities, dusty roads, etc. and at the same time ensure that the collected data will never be eligible for comparison to the NAAQS.

*The Department plans to acquire, with stakeholder involvement, sites that adequately meet siting criteria. Once these sites are acquired, the Department will run these sites concurrently with the old sites to provide a continuous data record in the represented area until the procedures for relocating a monitor/site have been completed. For any SLAMS or SPM monitoring, the Department is required by the EPA to use FRM/FEM monitoring. However, in the course of a special study, the Department may be able to make use of alternative methods in order to answer specific questions. The use of alternative methods will be used on a case-by-case basis based on project monitoring objectives.*

**5. The ETC recommends that the PLAN clearly identify which monitors will be used as Standard No. 2 and Standard No. 7 background monitors and that the PLAN clearly identify that these monitors are sufficient.** The ETC supports the PLAN's recommendation in eliminating many SO<sub>2</sub>, NO<sub>x</sub>, CO and particulate monitors around the state that are no longer relevant because historical ambient air quality measurements have been well below state and federal standards. However, it is the position of the ETC that it is important to maintain a sufficient number of monitors in all three (3) regions (Upstate, Central Midlands, and Coastal Plain) to meet the requirements for permitting new major sources and to demonstrate compliance with Standard No.2 – Ambient Air Quality Standards. The ETC recommends that the PLAN specifically identify which monitors will be utilized to provide “background” air quality data for each criteria pollutant in each of the three (3) regions.

*Since Standard 2 and 7 modeling is highly case-specific, the Department feels that it is inappropriate to designate specific monitors for modeling background. If a facility feels that a monitor does not adequately or conservatively represent their background (note this is background of the area in which the facility is located, not a background ambient monitor), the facility is free to initiate its own monitoring plan, with Department consent. Due to funds being cut on the national level for monitoring, the Department must prioritize its needs to the pollutants of greatest concern. The plan provides for collection of ambient data representing background and/or conservative concentrations for the Criteria Pollutants SO<sub>2</sub>, NO<sub>x</sub>, and CO to support planning, research and business community data users.*

**6. The ETC recommends that the PLAN be signed and certified by responsible SCDHEC officials.**

While there is a certification statement in the front of the PLAN which states that the information in the PLAN is complete and accurate; without a signature the ETC believes that the certification is inadequate. A certification signature will provide an official endorsement of the PLAN and that the PLAN was reviewed by high level SCDHEC officials, which is an important part of the approval process. Lastly, other Southeastern States, including North Carolina and Kentucky have included certification signatures as part of the PLAN.

*The Department agrees with this comment, and has modified the plan to include a signature block for responsible SCDHEC officials.*

**7. The ETC does not support the statement on Page “v” of the PLAN that declares: “All criteria pollutant monitors and samplers are sited and operated consistent with the requirements of 40 CFR 58 and Appendices A (Quality Assurance), C (Methods), D (Network Design) and E (Probe Siting) and data collected by these samplers and monitors is suitable for comparison to the National Ambient Air Quality Standards”.** The statement should be modified to say: “SCDHEC intends to operate its monitoring system with all criteria pollutant monitors and samplers sited and operated in accordance with the requirements of 40 CFR 58 and Appendices A (Quality Insurance), C (Methods), D (Network Design) and E (Probe Siting). As such SCDHEC intends that the data collected by these samplers and monitors is suitable for comparison to the National Ambient Air Quality Standards.” The ETC recommends that the PLAN state that an ISO-14001-type environmental audit was performed for fifteen monitoring sites by an audit team consisting of senior air quality experts from SCDHEC and environmental professionals from three (3) stakeholder groups and that SCDHEC fully endorses the field audits that were performed. Additionally, the ETC recommends that the table titled “PM<sub>2.5</sub> Sites” on Page “8” of the PLAN indicate that the PM<sub>2.5</sub> monitors at Greenville CHD, Taylors, West View, Irmo, and Bates House were determined, during the audit, to violate one or more requirements of 40 CFR 58 and, as a result, may not be suitable for comparison to the NAAQS. The ETC also proposes that the PLAN indicate that the remaining PM<sub>2.5</sub> monitors will be audited within the next few months in accordance with the audit checklist. A footnote under the table should be added that indicates the monitor’s suitability for comparison to the NAAQS is uncertain until the audit process is complete. The ETC recommends that the audit checklist be referenced in the PLAN and included as an attachment so it becomes information that EPA can utilize in making decisions to approve key elements of the PLAN. Please see the audit checklist, which is enclosed.

Additionally, the ETC recommends that a statement be included in the PLAN confirming SCDHEC’s commitment to include specific corrective actions to resolve as many of the audit findings as possible so that all monitors and samplers are operated consistently with applicable requirements.

The above paragraph highlights just a few examples of the ETC’s redline comments of the PLAN (see enclosed). All changes included in the “redlined” version of the PLAN are considered to be the complete set of comments from the ETC. As such, the ETC respectfully requests for SCDHEC to consider and address all comments as redlined in the plan in addition to the topics included in this summary.

*The Department agrees with the revision to the paragraph on page “v” and has made changes to clarify that it is the Department’s intent to meet all requirements of 40 CFR 58 and associated appendices. Furthermore, the Department concurs with the comment that the remaining PM<sub>2.5</sub> samplers that have not been visited by the joint DHEC/stakeholder group should be completed in the near future, and the Department commits to continuing this effort.*

*The Department agrees that any siting criteria that are found to not be consistent with 40 CFR 58 should be addressed and the Department will take steps to correct any deficiencies.*

*The Department intends to attach all public comments, in their entirety, to the Monitoring Plan for submittal to the EPA. Therefore, the audit checklist provided from all parties will be made a part of the permanent record for this plan.*

*The table referenced on page 8 of the proposed plan is an indication as to which monitors will be applicable to the PM<sub>2.5</sub> NAAQS. This plan is for calendar year 2008, and it is anticipated that each of the monitoring sites will be addressed in order to be comparable to these standards.*

8. The ETC also provided a redline version of the monitoring plan making typographical corrections.

*The Department concurs with these grammatical corrections, and has modified the plan accordingly.*

#### **Comments from SC Manufacturers Alliance (SCMA)**

Identical to the SC Chamber of Commerce ETC

#### **SC Pulp & Paper Association**

Identical to SC Chamber of Commerce ETC

#### **Georgetown County Ambient Air Monitoring Stakeholder Group**

On April 26, 2007, the Georgetown County Ambient Air Monitoring Stakeholder Group submitted recommendations to you concerning changes we recommended for inclusion in the “Plan”. In order of priority, we offered recommendations for the Georgetown CMS monitor, the Howard High #2 monitor, the Winyah monitor and the Maryville monitor.

1. Georgetown CMS – We feel the “Plan” fails to adequately address the serious deficiencies that have been documented to exist with this monitor:

1. The monitor is located much too close to local sources as documented during the audit.
2. The monitor violates numerous federal siting requirements and guidelines.
3. The monitor is located less than 50 meters from a bulk material unloading site.
4. Our analysis of past data has confirmed that the monitor has been inappropriately impacted by a state highway whose surface had seriously deteriorated causing excessive dust. This problem was resolved in late 2005 when the SC Highway Department repaired the road.
5. The site has been proven to be “microscale” based on data obtained during a special study conducted by DHEC but for which a final report has not yet been published.
6. The site is not located in an area that represents population exposure (exclusively an industrial area).
7. Nearby monitors in populated areas indicate air quality meets standards at all times.
8. The Georgetown CMS monitor is not located in a manner that is consistent with how neighboring states locate their ambient air quality monitors, and as a result, data comparison between the states is not possible.

9. Data from the Georgetown monitor gives the public a false impression that Georgetown County air quality is among the worst in the state when, in reality, data from other nearby monitors accurately indicate that our air quality meets all health and environmental standards.

**It was for these reasons that our Stakeholder Group recommended discontinuation of the Georgetown CMS monitor and we reiterate that recommendation in these comments of the “Plan”.**

*The Department believes that the Georgetown CMS site gives a representative picture of emissions in the area immediately surrounding the site. This site has allowed the Department to issue permits to some of the facilities with confidence because of the time resolution of the data. On numerous occasions, the Department has been able to identify issues with specific facilities and address those issues in a timely manner in order to avoid exceeding the standard. However, as the site is located in very close proximity to several local sources (e.g., truck parking, material handling, and road dust), and not located near inhabited buildings or locations where the general public can be expected to be exposed to the concentration measured, its data is not appropriate for comparison to the NAAQS. Therefore, while the site is important to monitor the activities of the facility, the Department will seek alternative means to monitor PM<sub>10</sub> that can provide data of sufficient quality to meet monitoring objectives at this location.*

2. Howard High #2 Monitor – We feel the “Plan” fails to adequately address the serious deficiencies that have been documented to exist with this monitor:

1. The monitor is located much too close to local sources as documented during the audit.
2. The monitor violates numerous federal siting requirements and guidelines.
3. The monitor is located less than 10 meters from an area where bulk materials are unloaded, stored and loaded again using heavy equipment.
4. The site is located within 100 meters of a home with wood burning appliances.
5. The site is “microscale” based on its close proximity to these sources.
6. The Howard High #2 monitor is not located in a manner that is consistent with how neighboring states locate their ambient air quality monitors.
7. Although this monitor indicates continual compliance with health and environmental standards, the data gives the public a false impression that Georgetown County air quality worse than it would be had the monitor been located in a manner consistent with federal regulations and guidance.
8. We strongly disagree with the proposal in the “Plan” that calls for adding a PM<sub>2.5</sub> monitor at this location. Doing so would be a direct violation of 40 CFR 58 Appendix D (1.2)(d) which suggests a “neighborhood scale is more appropriate” and such monitors should not be located “in the immediate vicinity of any single dominant source.”

**It was for these reasons that our Stakeholder Group recommended discontinuation of the Howard High #2 monitor and we reiterate that recommendation in these comments on the “Plan”.**

*The Department intends to relocate monitoring from this site to an improved monitoring location in the Georgetown area within the next 18 months. Monitoring at Howard High #2 will be discontinued when the procedures for relocating a site have been completed.*

3. Winyah Monitor – Since our April 26 recommendations, the Winyah monitor has been decommissioned due to construction of a new County Judicial Center at this location.

*The Department acknowledges this comment.*

4. Maryville Monitor – We concur with DHEC’s recommendation that this monitor be discontinued.

*The Department acknowledges this comment.*

5. We suggest that all changes planned for the next 18 months (e.g., July 1, 2007 through December 31, 2008) be included with sufficient specificity to document the reasons for the changes. **Until specific countermeasures to correct the audit deficiencies are incorporated in the “Plan”, we feel it is not ready for submittal to EPA.**

*All changes that are planned over the next 18 months are accounted for in the plan. If a site is not meeting all of the requirements of 40 CFR 58, or as many of the suggested siting criteria in applicable guidance as possible, the Department pledges to address those issues. The Department has addressed these issues in the plan, however, due to the fact that some of monitoring sites are located on private land, we must seek approval to make some of the changes (e.g., removal of trees/vegetation), fixed dates for addressing stakeholder concerns cannot be anticipated at this time. The Department will be in contact with the landowners and begin addressing these concerns.*

6. Following DHEC’s review of these and other public comments, and incorporation of appropriate changes to the “Plan”, we request the opportunity to again review the draft prior to submittal to ensure that adequate corrective actions have been included. We recognize the tight timing and pledge a very quick turnaround on this review. We appreciate your willingness and commitment to resolve the deficiencies by including specific corrective actions included in the “Plan”.

*The Department acknowledges this comment.*

#### **Anderson Area Chamber of Commerce**

Submitted comments thanking and to voice their support of the Department’s efforts in developing the monitoring plan. The Anderson Area Chamber of Commerce offers its assistance in obtaining alternative sites when the time is appropriate. They state “Of course we know that the Bureau will select sites based on their appropriateness under the applicable location regulations and guidance, but to the extent that the Anderson Area Chamber of Commerce can make alternative sites available for consideration or simply assist in locating appropriate properties, we commit to do so”.

*The Department acknowledges this comment.*

#### **Anderson Area Chamber of Commerce Health, Safety & Environmental Committee**

Submitted comments in support of the Chamber of Commerce ETC comments. Additionally, they emphasize two areas:

1. “First, we believe that all monitors used to determine compliance with [NAAQS] should meet all of the Federal Regulations ‘musts’ and as many monitoring siting guidance ‘shoulds’ as possible. This reflects sound science and sound practices, and is intended to collect representative data which can be used with confidence in determining compliance with standards.”

*The Department agrees with this comment and has modified the introduction to the plan to add language that states “It is the Department’s intent that all criteria pollutant monitors and samplers be sited and operated consistent with the requirements of 40CFR §58 and Appendices A (Quality Assurance), C (Methods), D (Network Design) and E (Probe Siting Criteria) and the data collected by these samplers and monitors is suitable for comparison to the National Ambient Air Quality Standards. The Department further intends to assure that the samplers and monitors comply with as many of the recommendations contained within the regulations and applicable guidance documents as is possible.”*

2. “Second, the Monitoring Plan proposes to add a new monitoring site in Greenville County and recommends replacing the Greenville County Health Department monitor with the new monitor if, after a year, data are ‘comparable’ for the two monitors. As there are concerns that the Greenville County Health Department monitor may not be representative of ambient air conditions (due to local conditions/sources) and the location does not meet one of the 40 CFR 58 Appendix E criteria, the objective of using an alternate monitor is to represent ambient air conditions for the broad area. If the new monitor is located to meet regulatory and guidance ‘musts’ and ‘shoulds’, and is not influenced by local sources, then it should be considered for use in determining compliance with standards. A goal of generating ‘comparable’ data to the Greenville County Health Department in order to consider relying on the new monitor is not valid.”

*The Department acknowledges this comment. The plan language has been corrected to clarify that the Department intends to relocate PM<sub>2.5</sub> monitoring from this site to an improved monitoring location in the downtown Greenville area within the next 18 months. PM<sub>2.5</sub> monitoring at Greenville CHD will be discontinued when the procedures for relocating a monitor have been completed.*

3. “Finally, we want to recognize that we understand that an ultimate goal of the monitoring network is to assess air quality and provide protection for public health. We fully support the protection of our employees and citizens of our community, and support the existing Early Action Compact activities. If there are air quality issues that need to be addressed through additional voluntary or mandatory actions, we stand ready to support these actions. However, we ask that any such actions be based on a representative, accurate, and reliable monitoring network such that resources expended to protect public health are wisely directed and achieve improvements in public health.”

*The Department acknowledges this comment and thanks the Anderson Chamber of Commerce for their support in identifying new monitoring locations in their communities.*

### **The Greater Greenville Chamber of Commerce**

Submitted comments thanking and to voice their support of the Department’s efforts in developing the monitoring plan. The Greater Greenville Chamber of Commerce offers its assistance in obtaining alternative sites when the time is appropriate. They state “Of course we know that the Bureau will select sites based on their appropriateness under the applicable location regulations and guidance, but to the extent that the Chamber can make alternative sites available for consideration or simply assist in locating appropriate properties, we commit to do so”.

*The Department acknowledges this comment.*

### **The Greater Greenville Chamber of Commerce Environmental Issues Committee**

The Chamber offered thanks for the Departments efforts to provide for public input into the monitoring plan.

*The Department acknowledges this comment.*

1. The stakeholders and your staff undertook a review of the Upstate, Midlands, and Georgetown area monitors. During the site audits, a checklist was completed and I understood that your staff agreed with the findings from the site audits. The checklist included a section that provided detail on the “musts” from Appendix E and the 1997 guidance documents for the PM<sub>2.5</sub> monitoring sites. There are several sites that do not meet one or more of the “musts” listed on the checklist, and as such, do not meet the minimum requirements for ambient air monitoring sites. As a consequence of this review process, there are two

points on which the PLAN must be based. The first point is that the PLAN cannot state without qualification that “all sites meet” the requirements of the regulation and its appendices. The PLAN can state that SCDHEC intends to make necessary site modifications or site relocations to achieve compliance with the requirements.

*The Department agrees with this comment in principle. The Department agrees with the revision to the paragraph and has made changes to clarify that it is the Department's intent to meet all requirements of 40 CFR 58 and associated appendices. However, the purpose of the staff during the site visits was to provide access and assist in the documentation of stakeholder concerns. The Department commits to addressing any deficiencies identified during the visit and will address those concerns during the implementation phase of the monitoring plan.*

2. Proper data quality control and assurance procedures appear to be in place to assure that the data was generated using methods consistent with the instrument operating requirements. The second point is that the data are not representative of the monitored area if the monitors are not located in a manner consistent with the siting requirements.

*The Department acknowledges this comment. The Department is committed to correct any inconsistencies between the requirements under 40 CFR 58 and as many of the recommendations found in the applicable guidance documents as possible.*

3. Based on these observations, the following statements on pages iv and v of the PLAN should be modified as noted in the redlined version of the PLAN developed by the State Chamber Environmental Technical Committee.

*The Department acknowledges this comment and has made changes to some of the language on the referenced pages. The Department disagrees with the language provided in the redline/strikeout attachment on page v that states “For this reason, SCDHEC will start-up and shut-down sites as necessitated by site conditions”. The Department believes that it may not be feasible to shut-down sites in all cases. Monitors are established to meet specific objectives which may be met even though there are deviations from siting requirements and applicable guidance.*

4. “All data generated by the network is verified to be accurate and reported by the Division and stored in the national database.” Page iv.

This statement is not accurate, particularly in reference to some of the “special purpose” monitoring data. The term “special purpose” is used in the context defined in the ambient air monitoring regulation. I hope that it is accurate to state that data used for comparison against national standards are verified as accurate.

*The Department disagrees with this comment. Regardless of the monitor type, it has always been the Department's position that monitors are operated in such a way to produce data that is comparable to the NAAQS. Additionally, 40 CFR 58.20 requires the Department to provide evidence that operation of the SPM meet the requirements of appendix A (Quality Assurance).*

5. “All criteria pollutant monitoring is performed using EPA designated Federal Reference Methods (FRM) or Federal Equivalent Methods (FEM) to insure the precision and accuracy of the measurements across the state network and that the data can be compared to the [NAAQS].” Page v.

This statement should be modified to read as:



“SCDHEC intends to operate its monitoring system with all criteria pollutant monitors and samplers sited and operated in accordance with the requirements of 40CFR§58 and Appendices A (Quality Assurance), C (Methods), D (Network Design) and E (Probe siting).

As such, SCDHEC intends that the data collected by these samplers and monitors is suitable for comparison to the [NAAQS]. The SCDHEC further intends to assure that the samplers and monitors comply with as many of the recommendations contained within the regulations and applicable guidance documents as is possible. For this reason, SCDHEC will start-up and shut-down sites as necessitated by site conditions.”

*The Department agrees with this comment and has modified the introduction to the plan to add language that states “It is the Department’s intent that all criteria pollutant monitors and samplers be sited and operated consistent with the requirements of 40CFR §58 and Appendices A (Quality Assurance), C (Methods), D (Network Design) and E (Probe Siting Criteria) and the data collected by these samplers and monitors is suitable for comparison to the National Ambient Air Quality Standards. The Department further intends to assure that the samplers and monitors comply with as many of the recommendations contained within the regulations and applicable guidance documents as is possible.”*

6. The third point is that for this PLAN, each time a monitor must be modified or relocated to achieve compliance with the site requirements, the proposed change should be explicitly stated in the PLAN. The redline version of the PLAN developed by the State Chamber Stakeholders Group reflect this point.

*The Department agrees with this comment. The plan is required to reflect any proposal to move or remove a monitoring station. This requirement has been met by listing the parameters at the site and then listing the parameters that are to be terminated or where there is planned a method or schedule modification.*

7. One final comment, the Bureau of Air Quality has made a statement several times that the “winter study” in Greenville demonstrated that the Greenville County Health Department (Greenville CHD) site produces data that is representative of the air quality in the downtown Greenville area or “neighborhood scale”, as defined in the ambient air monitoring regulations. Repeated requests have been made for the statistical demonstration that the “winter study” data is comparable to the Greenville CHD data. I am concerned that these data have been not evaluated using statistical tools. I believe that any statement that the “winter study” data are the “same” as the Greenville CHD data is without merit in the absence of a statistical evaluation of the data.

SCDHEC has agreed to establish a new downtown Greenville site. Therefore, it is perhaps not necessary to do the statistics tests on the data generated in the “winter study” and from the Greenville CHD. However, if no technical evaluation of the data is made, it is not appropriate to make claims regarding the “similarity” or “representativeness” of the data generated by the monitor located at Greenville CHD.

*The Department acknowledges this comment.*

**McNair Law Firm – representing Anderson County, Greenville County, Spartanburg County, the City of Greenville, the Anderson Chamber of Commerce, the Greater Greenville Chamber of Commerce, the Spartanburg Chamber of Commerce, and the Spartanburg Development Association**

McNair believes that modifications to the monitoring plan should be made in order to 1) acknowledge concerns with the current Greenville PM2.5 monitor location; 2) provide for immediate designation of the current monitor as a special purpose monitor for further evaluation of air quality around adjacent

residences; 3) provide for immediate installation of a new monitor meeting applicable siting criteria for evaluation of area-wide compliance with the NAAQS.

1. McNair raises issue with the statement on page v that states that all monitors meet the 40CFR 58 criteria.

*The Department agrees with this comment and has modified the introduction to the plan to add language that states "It is the Department's intent that all criteria pollutant monitors and samplers be sited and operated consistent with the requirements of 40CFR §58 and Appendices A (Quality Assurance), C (Methods), D (Network Design) and E (Probe Siting Criteria) and the data collected by these samplers and monitors is suitable for comparison to the National Ambient Air Quality Standards. The Department further intends to assure that the samplers and monitors comply with as many of the recommendations contained within the regulations and applicable guidance documents as is possible."*

2. Raises questions over the narrative of the Greenville CHD site. Specifically discusses the lack of statistical analysis done for the winter study, yet SCDHEC claims that the sites are comparable. McNair references SC's letter to EPA discussing concerns over atypical PM<sub>2.5</sub> impacts during cooler months.

*The Department acknowledges this comment.*

3. McNair believes that due to siting conditions, there is sufficient evidence to justify the immediate termination of the Greenville CHD site. McNair is willing to have the site designated as a SPM and wants SCDHEC to immediately establish an alternative location for monitoring PM<sub>2.5</sub>.

*The Department acknowledges this comment. The Department is committed to establishing a second downtown Greenville monitoring site. The plan language has been corrected to clarify that the Department intends to relocate PM<sub>2.5</sub> monitoring from this site to an improved monitoring location in the downtown Greenville area within the next 18 months. PM<sub>2.5</sub> monitoring at Greenville CHD will be discontinued when the procedures for relocating a monitor have been completed.*

4. McNair is supportive of SCDHEC's efforts to relocate the Taylors and West View sites. McNair wants SCDHEC to explicitly state in the plan that the justification for relocating the monitors is due to a failure to meet siting criteria at the current sites.

*The Department acknowledges the support but disagrees that the justification for relocating these monitors is due to a failure to meet siting criteria at the current sites. The monitors, when originally sited were part of an MSA that stretched from Anderson to Spartanburg Counties, and the Monitor Planning Area network was designed to represent the variety of population exposures, land uses and particulate matter source regions in the area. Now that the MSA definitions and the monitoring requirements have been revised, relocation of monitors is required to meet current monitoring objectives.*

5. Attached to the comments was a study commissioned by commenter to examine the siting criteria of the Greenville CHD. This packet was prepared by representatives of Kestrel Horizons, URS and OMNI Professional Environmental Associates.

Additionally, attached a letter dated 9/8/2004 from SCDHEC to EPA reaffirming our initial recommendations stating that the entire state was in attainment of the PM<sub>2.5</sub> annual standard.

*The Department acknowledges these two attachments.*

## National Parks Service

The National Parks Service (NPS) is requesting that we retain the Cowpens monitor site. Currently, Cowpens, along with several other National Parks are participating in a study to evaluate the Field Ozone Injury Assessment Handbook using the yellow crownbeard as a bioindicator. Cowpens was chosen to be part of the study due to the presence of the station within the park.

They state that while SCDHEC's primary mission is the protection of public health, one of the NPS's missions is the protection of public welfare. They feel that with the new ozone standard being close to proposal, the Cowpens site may be with in range to violate the standard. In addition, they point out that EPA is considering a secondary standard using the SUM06, which is the same statistic they use in the ozone injury protocol. SUM06 sums all hours with ozone concentrations over 0.06ppm, when a certain accumulated amount of ozone is summed, then ozone injury may be expected to occur.

NPS provided data from the Cowpens monitor showing that "Removing the ozone monitor from Cowpens is premature both for assuring that the area doesn't exceed the ozone NAAQS and for determining the trend." NPS is concerned that we do not know if the decline in ozone concentrations are due to NOx reductions as part of the NOx SIPCall, or due to climate variation at this point.

NPS points out that Cowpens sits at the edge of a nonattainment area and is the only rural site in the area. NPS provided a map of SUM06 cumulative ozone from the NPS Air Atlas (2000-2005 average). Cowpens is in the 21-25 ppm hr-1 contour, which is above the values expected to lead to vegetation injury.

NPS states that ozone concentrations are elevated over what would be expected in rural areas in the East and are considerably over expected background conditions.

*The Department acknowledges the importance of NPS's research on vegetative damage due to ozone, and was not aware of the Cowpens participation in the Cumberland Piedmont Vital Signs Network projects. The proposal of a cumulative, seasonal exposure form for the secondary ozone standard is an indicator of EPA's recognition of the potential for vegetative impacts.*

*The Department will commit to continue ozone monitoring at Cowpens through the 2008 ozone season to support current research and welcomes discussions with the NPS and interested researchers to secure additional support if monitoring is needed beyond 2008.*